

4. ALTERNATIVES

Drawing from information gathered in the analysis, from meetings with decision makers and technical advisors, and from other related planning efforts, three conceptual plan alternatives were developed that explore a range of options for the Seattle Parks and Recreation (Parks) property lying directly on the shoreline. This chapter first summarizes the objectives that guide the alternatives and serve as criteria against which the alternatives will be evaluated. The three alternatives are then described, compared and evaluated in this chapter.

Planning Objectives and Concepts

The three conceptual plan alternatives presented in this chapter were all guided by the same set of objectives and design parameters presented in the *Planning Objectives* in Chapter 1 and in Chapter 3, *Analysis of Individual Elements*. The objectives are divided into four broad categories: 1) Land and Shoreline Uses; 2) Public Spaces; 3) Pedestrian Circulation; and, 4) Habitat Restoration.

Land and Shoreline Uses

The City Council's framework principles call for balance and integration of a mix of land uses in each shoreline zone. The principles also emphasize providing diversity and flexibility over time and healthy economic development.

A key question of this feasibility study is whether or not a roughly 4,000-seat concert venue is the best use of Piers 62/63 or whether the overwater coverage might be better used for other activities. Since no new overwater coverage is allowed by current environmental regulations, the amount of overwater coverage for new decks, walkways, the Aquarium, moorage, etc., must likely be less than what exists currently.

The alternatives focus primarily on different approaches to the waterside development. The Multipurpose Pier alternative explores the implications of reconfiguring and relocating Piers

62/63 as a concert venue with additional public uses, while the other two explore options in which the overwater construction is used for smaller and more linear spaces. All three alternatives build on the Aquarium as a central attraction and are intended to complement the Bell Harbor Pier to the north and commercial and public spaces to the south. The conceptual design for the lid maximizes redevelopment that integrates Market activities with the shoreline and creates “active edges” around public spaces.

Transient moorage for visiting vessels, such as the Lady Washington or Navy and Coast Guard ships (e.g. for Seafair), and for vessels open for public viewing (e.g. tugboats during maritime week) is a feature of all alternatives presented in this study. While a program for the mooring vessels has been identified, it is assumed that a more detailed analysis of the facility implications of this element will be conducted during final design.

Public Spaces

The Council's principles, the Design Commission's recommendations, input from the Board of Park Commissioners, and public forum input all emphasize the importance of public spaces that bring people together for a variety of activities.

Participants in this study expressed a wide variety of ideas regarding public spaces. Some envisioned a grand, central public space, whereas others were drawn to a composition of smaller spaces. Some comments favored early sketches showing more vegetated, greener spaces, but the majority felt an urban character would be more appropriate. The alternatives explore a variety of public space parameters, including:

- Large *versus* smaller spaces.
- Linear spaces *versus* more central plazas. (The notion was raised that the attraction of the water's edge means that most successful shoreline spaces are essentially linear.)
- The method of handling the grade change from the Market to the waterfront and across Alaskan Way.
- The connections between spaces.

- Spatial character, enclosure, and geometry. (Generally, review comments and the general character of the area led the team to emphasize a dynamic set of interlocking spaces rather than formal or enclosed spaces.)
- Incorporation of natural features. (Some alternatives include a naturalized gravel beach in the spectrum of public spaces.)
- Special purpose spaces *versus* multi-use spaces.

Pedestrian Circulation

Participants at the public forums sponsored by the Planning and Design Commissions to initiate the waterfront planning process overwhelmingly stressed the importance of connecting the waterfront to Downtown with comfortable, safe pedestrian links. The City Council's framework principles stress the waterfront/Downtown linkage as well. Besides the east-west connections, excellent pedestrian movement up and down the waterfront is also critical, and the Design Commission has been working to identify a configuration of Alaskan Way that provides additional sidewalk and pedestrian space along the shoreline.

Unfortunately, improving pedestrian mobility in both directions presents challenges. As can be seen in Figure 7 on page 17, the most important route from the Market and Downtown to the waterfront is along the Pike Street Hillclimb corridor, which, under current plans, will include a 9-foot elevation drop from the east side of Alaskan Way to the west side. This will make pedestrian movement difficult, especially for those in wheelchairs or with strollers or bicycles.

To address this problem, the alternatives explore three different approaches to crossing Alaskan Way. The Aqua Link alternative emphasizes the crossing at Union Street, which does not feature a grade change. The Connector alternative features a pedestrian over-crossing that also expands the lid plaza and serves as a signature landmark, as suggested in the current Department of Planning and Development (DPD) Waterfront Concept Plan. The Multipurpose Pier option envisions the Pine Street crossing as being most important as it feeds directly into the new pier and its perimeter activities.

Pedestrian movement along the waterfront is a special challenge between Union and Pike Streets because the sidewalk is narrow and there is no opportunity to widen it without restricting the roadway.

All three alternatives aim at improving north-to-south pedestrian mobility by providing a continuous pedestrian walkway at the water's edge. While not as direct a route as along the Alaskan Way sidewalk, these boardwalk or esplanade connections will be very attractive and help to reduce congestion along the seawall.

Vehicular circulation is also a concern. The Council's principle on "Destination and Movement" calls for multimodal access. This study is based on the street design and transit configuration currently being planned by other City departments, which includes two travel lanes and a bike lane in each direction, with the streetcar sharing one of the travel lanes in each direction.

Habitat Restoration

Pursuing environmental sustainability through restoring aquatic habitats, reducing pollution, and exploring innovative environmental design ideas was another common theme emphasized by the Council's framework principles, forum participants, design charrette schemes, and People for Puget Sound's efforts.

Regarding environmental concerns, the focus of this feasibility study is to explore options for improving conditions for juvenile salmon migrating along the shoreline of Seattle's Central Waterfront. This objective is shared by other local and regional entities, specifically Watershed Resource Inventory Area (WRIA) 9, Shared Strategy for Puget Sound, and People for Puget Sound. *(See the discussion of marine nearshore habitat in Chapter 3, Analysis of Individual Elements, and also the discussion of the WRIA 9 Salmon Habitat Plan in the Other Planning Efforts section of Chapter 2, Context.)*

The focus on juvenile salmon is not solely because of the Chinook salmon's listing under the Endangered Species Act. Ecological evidence suggests that improving conditions for juvenile salmon will concurrently produce healthier, more diverse marine habitats for a variety of native species and help this portion of shoreline play a more productive role within the Elliott Bay/Puget Sound ecosystem.

The team's environmental restoration experts identified nine different types of intertidal habitat improvements that would benefit juvenile salmon in this section of shoreline:

- A shallow-water migration corridor composed of sand, gravel, and cobbles that is not shaded by overwater structures.
- A foreshore composed of a range of gravel sizes.
- A backshore (upland beach) composed of coarse sand.
- Submerged rock or another type of support structure to retain the fill used to create the corridor or backshore/foreshore.
- Submerged rock or wave attenuation structure to create a low wave energy environment and provide a sheltered area for juvenile salmon.
- Freshwater inputs.
- Kelp forests.
- Tide pools.
- Riparian vegetation, preferably overhanging the water to provide land-based prey resources for juvenile salmon.

These improvements can be mixed to create an appropriate ecological restoration strategy for the study area.

Based on these possible improvements and further discussions with habitat experts, the team developed five habitat restoration options, which are illustrated, with sections cut perpendicular to the shoreline, in Figure 54 on page 77. Each option provides different benefits to salmon and the ecology in general, as indicated in Table 13 on the following page. The habitat options are not mutually exclusive: Each planning alternative combines two or more of the habitat features to provide diversity and take advantage of bathymetric conditions and pier configurations. A planning-level comparison of relative construction costs for each option is presented in the "Relative Cost Comparisons" section at the end of this chapter.

Table 13. Characterization of Proposed Habitat Options

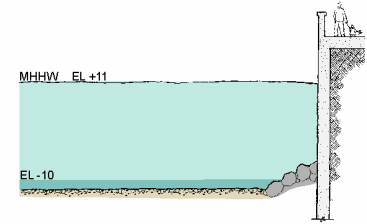
	#1 Habitat Bench	#2 Extended Foreshore	#3 Submerged Wave Attenuator	#4 Pier- Mounted Wave Attenuator	#5 Foreshore/ Backshore
HABITAT FEATURES					
Shallow water migration corridor	●	●	●	●	●
Foreshore		●	●	●	●
Backshore					●
Rock as support for fill	●	●	●	●	●
Wave attenuation			●	●	
Freshwater inputs ¹	●	●	●	●	●
Kelp forests	●	●	●	●	●
Tide pools ²		●	●	●	●
Riparian vegetation	●	●	●	●	●
BENEFITS TO JUVENILE SALMON³					
Increased availability of food	+	+++	+++	+++	+++
Energy refuge	+	++	+++	+++	++
Improved ability to avoid predators	+	++	++	++	+++

¹ Though not shown in the sections on the following page, freshwater inputs could be included in any alternative.

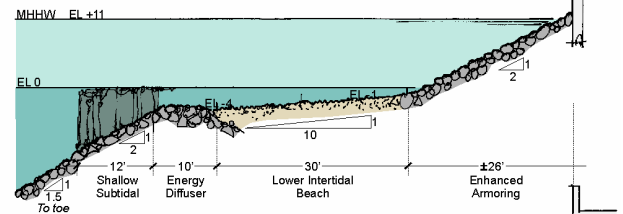
² Though not shown in the sections on the following page, tide pools could be included in these four alternatives.

³ 0 = No benefit provided
 + = Some potential benefit provided
 ++ = Benefit provided
 +++ = Exceptional benefit provided

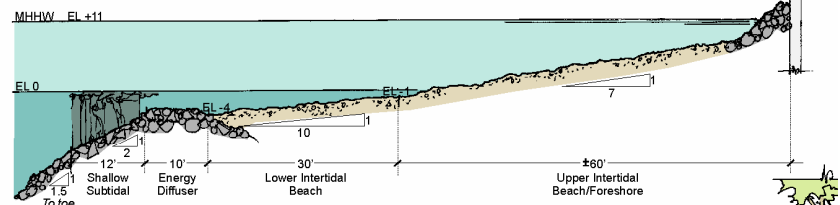
Existing Condition



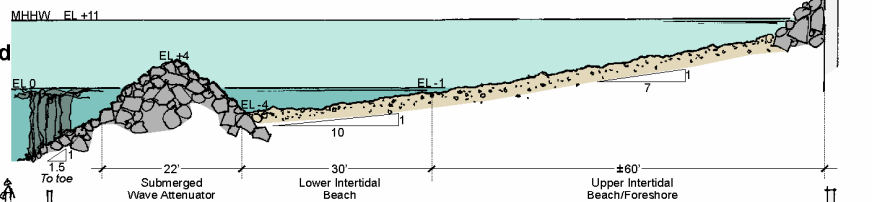
#1 Habitat Bench / Migration Corridor



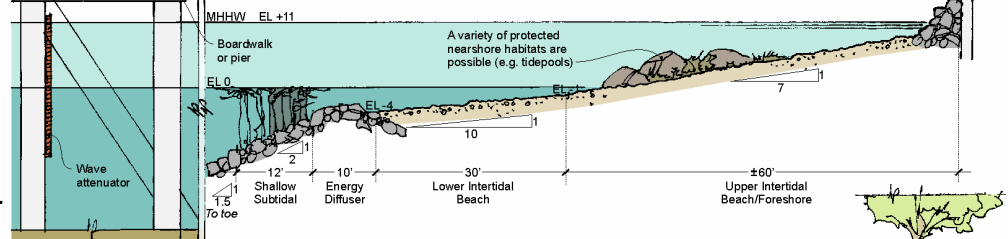
#2 Extended Foreshore



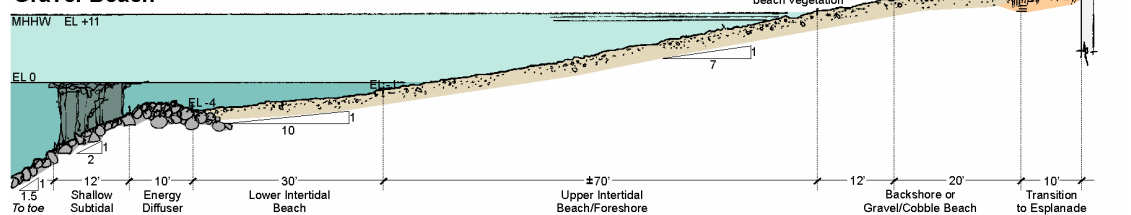
#3 Protected Intertidal Habitat with Submerged Wave Attenuator



#4 Protected Intertidal Habitat with Pier-Mounted Wave Attenuator



#5 Foreshore/Backshore Gravel Beach



- Intertidal
- Subtidal
- Large and Small Rocks
- Small Rocks and Pebbles

Kelp Bed

Note: Lower intertidal beach designed to be submerged during primary juvenile salmon migration



Figure 54. Proposed habitat options.

Conceptual Plan Alternatives

Three conceptual alternatives were developed in this study and are described on the following pages. Though each alternative looks like a complete design, the individual elements of each could be interchanged. In fact, the preferred alternative will likely be a combination of unique elements drawn from each of these three conceptual plan alternatives.

While this study focused primarily on the waterside park elements, it was necessary to also consider the upland spaces and pedestrian connections in order to:

- Identify potential circulation routes from the Market and Downtown to the waterfront.
- Identify potential spatial and functional relationships between the upland and shoreline areas.
- Explore opportunities for public facilities and public/private development.

Additionally, the construction of the SR 99 tunnel lid provides the opportunity to plan the various spaces managed by Parks as a unified whole. Therefore, the study team preliminarily explored options for the lid. Because a decision on the lid configuration is not as urgent as finding a direction for the shoreline, specific alternatives for the lid were not pursued. Rather, the team prepared a schematic diagram of lid options that are common to all of the alternatives, illustrated in the figure on the facing page. This schematic design was translated into a set of principles or guidelines that can be used as planning and design of the lid progresses. These guidelines and principles, presented in the next chapter, *Recommendations*, are not intended as restrictive standards, but as initial concepts that record current objectives and helpful suggestions for later work.

Lid Design Elements and Principles

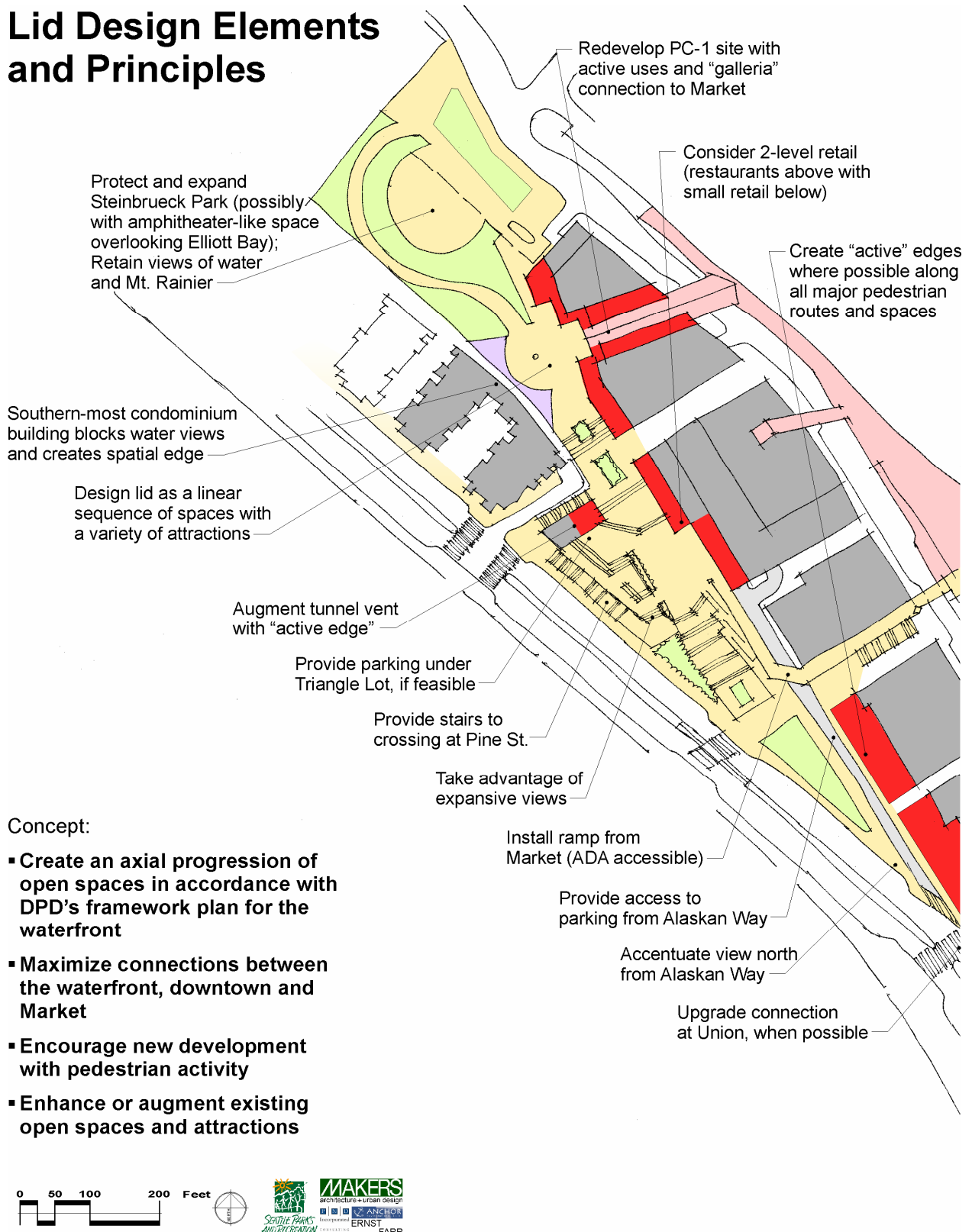


Figure 55. Lid design elements and principles.

Aqua Link

The Aqua Link alternative is so named because its principal feature is a north-south pedestrian connection along the water's edge around the Aquarium, alleviating congestion on the sidewalk and providing the maximum circulation to the water. This configuration envisions the Aquarium as the "jewel" within a setting of public spaces. It is also a link to the water because it includes a long publicly accessible beach. The gravel beach will be primarily for habitat and restoration purposes, but it would also provide the opportunity for visitors to touch the water. The major link back to Downtown will be via an opened Union Street corridor, where the grade across Alaskan Way is level.

Table 14. Summary of Aqua Link Alternative

	FEATURES AND BENEFITS	DISADVANTAGES AND QUESTIONS
Uses	<ul style="list-style-type: none"> Helps to activate the Aquarium by providing an outdoor educational experience. A temporary barge/raft could accommodate performances and special features. 	<ul style="list-style-type: none"> Can the Aquarium provide an "active edge" on the water side? Who would manage the barge/raft?
Spaces	<ul style="list-style-type: none"> Provides the maximum water experience. The barge/raft adds a lot of opportunities. 	<ul style="list-style-type: none"> The spaces are somewhat disjointed. How can the areas around the Aquarium be energized?
Circulation	<ul style="list-style-type: none"> Provides good Alaskan Way crossings at Union and Pine. Supports Pine Street development. Relieves congestion on the Alaskan Way sidewalk. 	<ul style="list-style-type: none"> Provides a poorer connection to the Aquarium entry.
Habitat	<ul style="list-style-type: none"> The long beach maximizes that habitat type. The protected area at Pier 58 provides educational opportunities. 	<ul style="list-style-type: none"> Provides less protected cove habitat than other alternatives.
Phasing	<ul style="list-style-type: none"> The waterside walks and decks could be built anytime. Provides beach restoration with the seawall repairs. 	<ul style="list-style-type: none"> Requires near-term Aquarium expansion for maximum effectiveness.

Aqua Link Land Uses

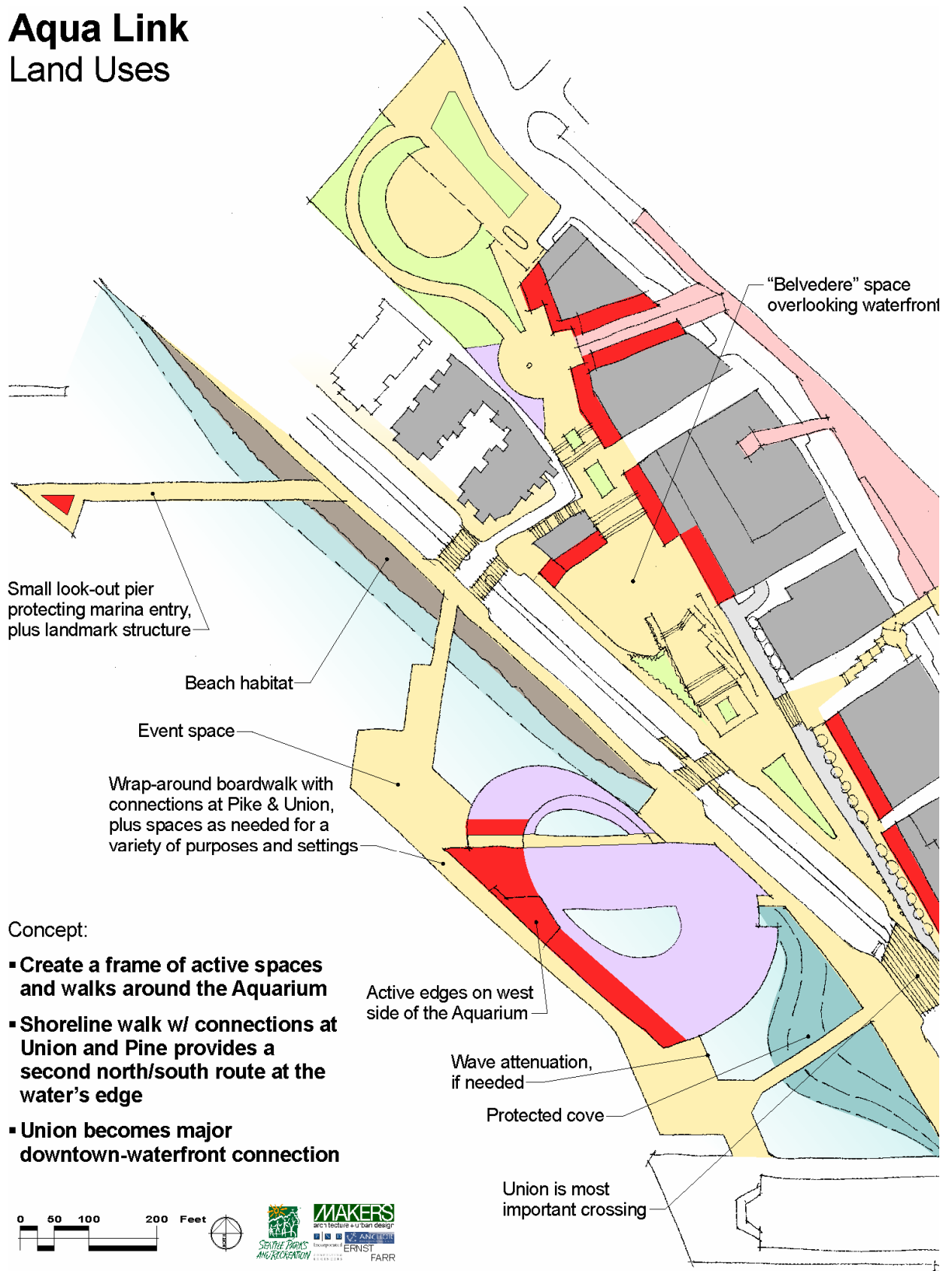


Figure 56. Aqua Link land uses.

Aqua Link Public Spaces

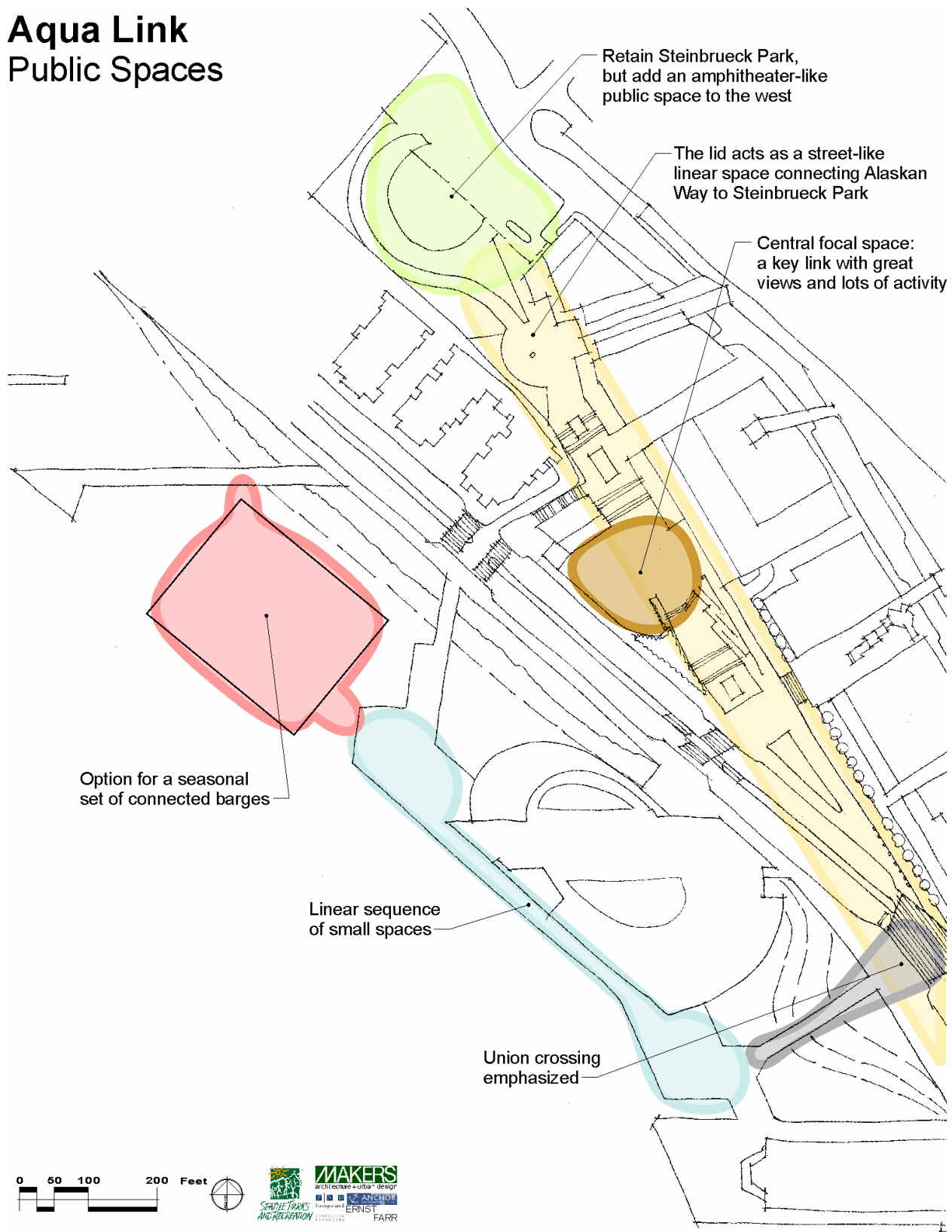


Figure 57. Aqua Link public spaces.

Aqua Link Pedestrian Circulation

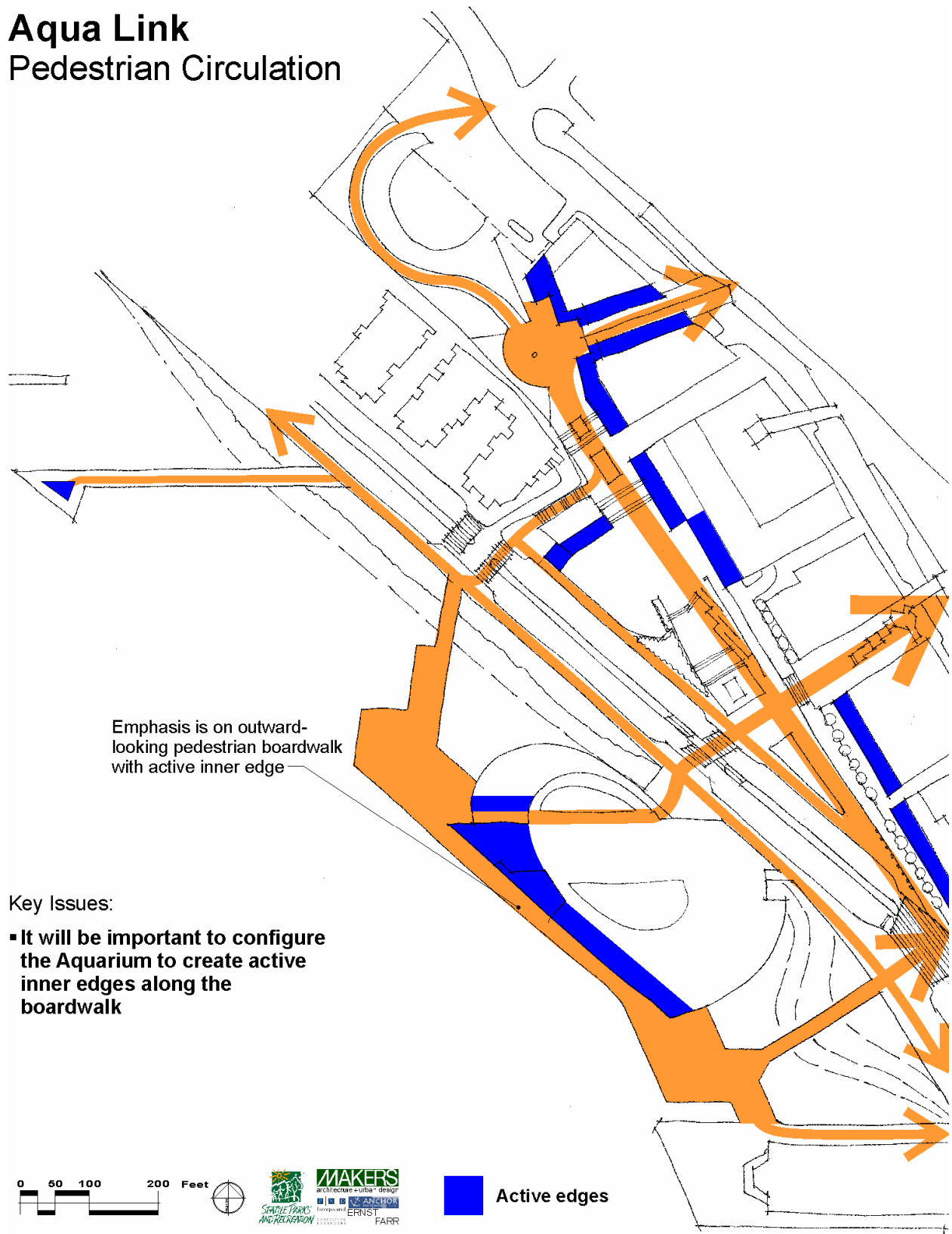


Figure 58. Aqua Link pedestrian circulation.

Aqua Link Habitat

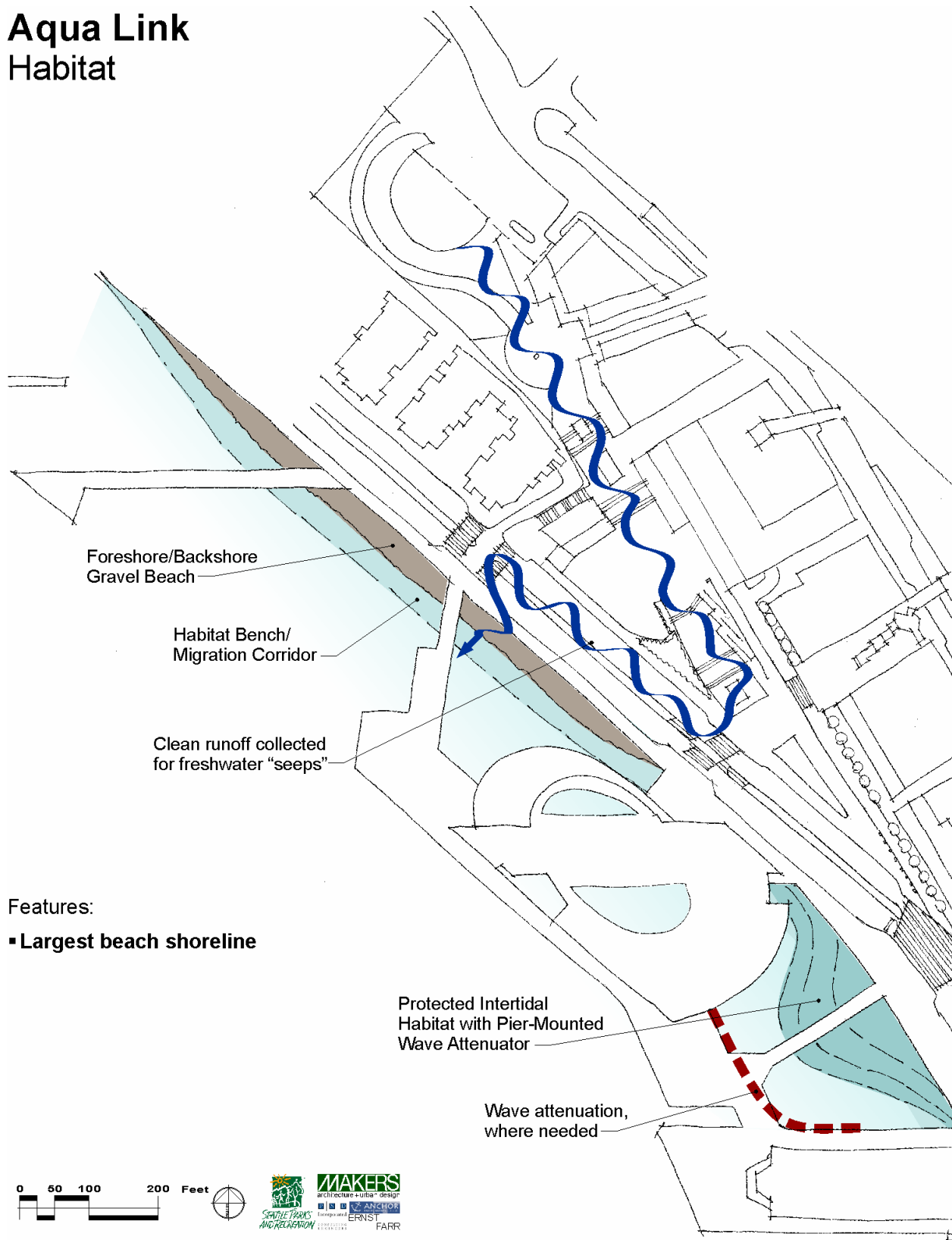


Figure 59. Aqua Link habitat.

Aqua Link Phasing

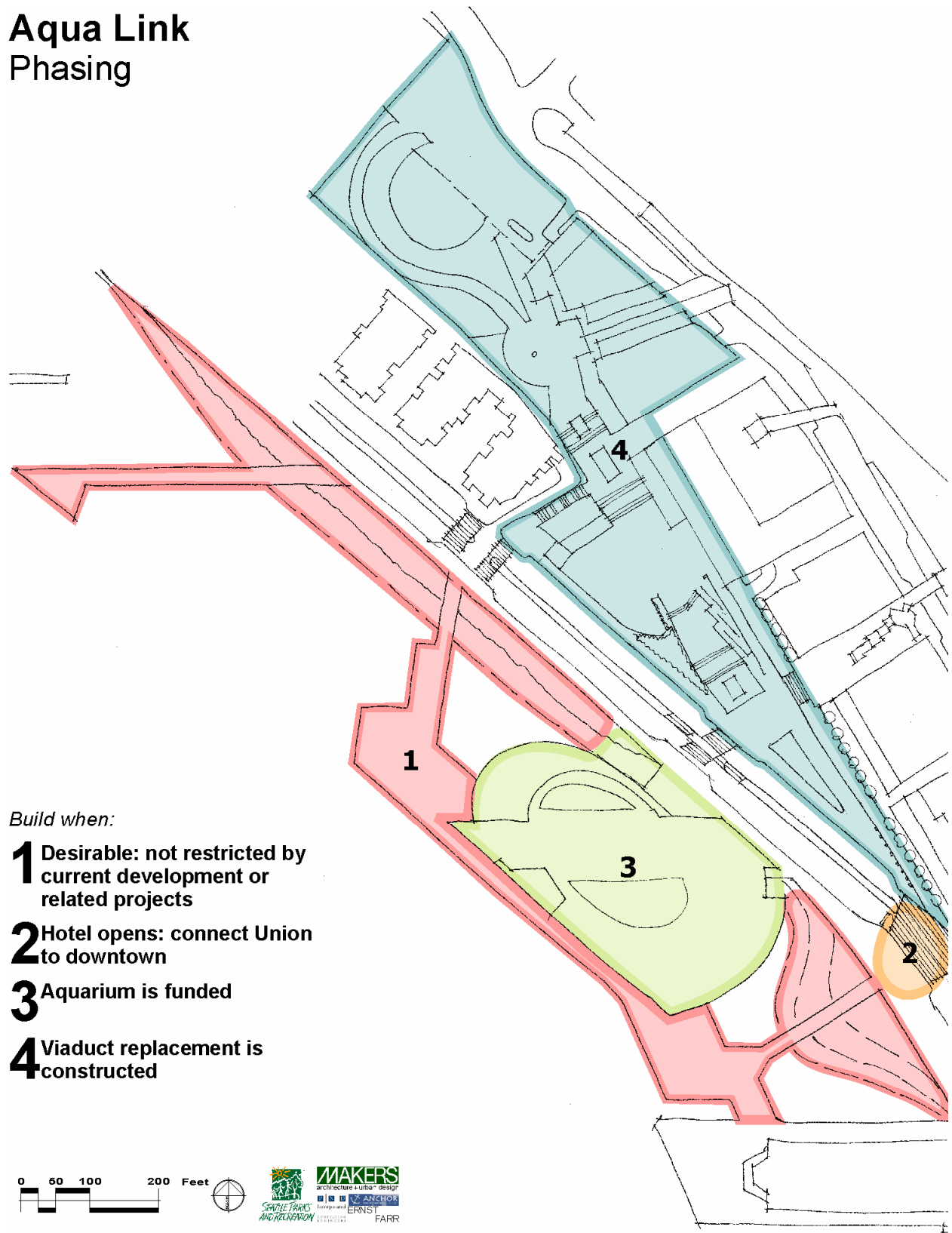


Figure 60. Aqua Link phasing.

The Connector

The Connector emphasizes linking the Market and Downtown to the waterfront through a set of elevated ramps and crossings activated by perimeter uses. It provides the strongest connection from Downtown and the Market to the Aquarium at the north side of the historic pier structure. The connecting elements create a ring of public spaces, each with a different function and character. Under this alternative, Aquarium expansion would be primarily to the south, allowing for open space and an entry on the north. The Connector is characterized by iconic signature structures: a landmark pedestrian bridge to provide a graceful link between the lid and the water, a transparent pavilion for everyday activities and special events, and a delicate footbridge connecting the Aquarium to a small Pier 63 deck. The scheme allows a combination of beach and protected cove habitats.

Table 15. Summary of The Connector Alternative

	FEATURES AND BENEFITS	DISADVANTAGES AND QUESTIONS
Uses	<ul style="list-style-type: none"> The pavilion allows year-round activities and events. The Aquarium expands to the south, with outdoor activities to the north. Provides a lot of “active edges.” 	<ul style="list-style-type: none"> Will “active edges” on the waterside work? Will the pavilion be used?
Spaces	<ul style="list-style-type: none"> A large space on the lid will be a focus. Provides waterside decks with “active edges.” The area will feel like a large ring of spaces. 	<ul style="list-style-type: none"> The beach feels enclosed. Will the waterside spaces be “active”?
Circulation	<ul style="list-style-type: none"> The pedestrian bridge provides the best connection across Alaskan Way. Provides a Pike Street skywalk from the south Market area to the lid. The footbridge provides an exciting experience 	<ul style="list-style-type: none"> Is a pedestrian bridge across Alaskan Way acceptable?
Habitat	<ul style="list-style-type: none"> Provides roughly equal amounts of beach and cove. This ratio could be adjusted by wave attenuation. 	
Phasing	<ul style="list-style-type: none"> The pavilion and deck could be part of SR 99 construction staging. Project elements are tied to tunnel and Aquarium construction. 	<ul style="list-style-type: none"> The pedestrian bridge must wait until SR 99 and Aquarium construction.

The Connector Land Uses

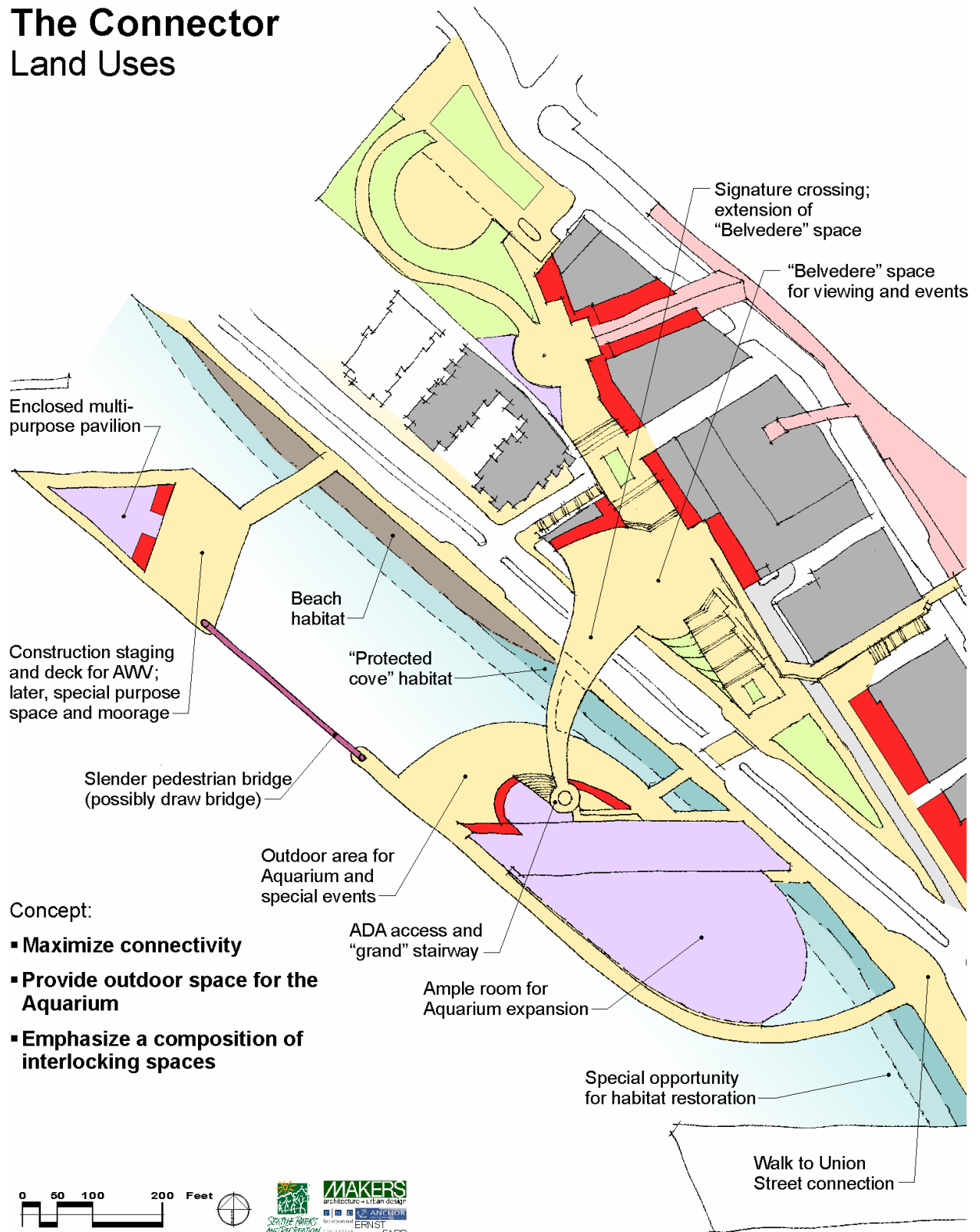


Figure 61. The Connector land uses.

The Connector Public Spaces

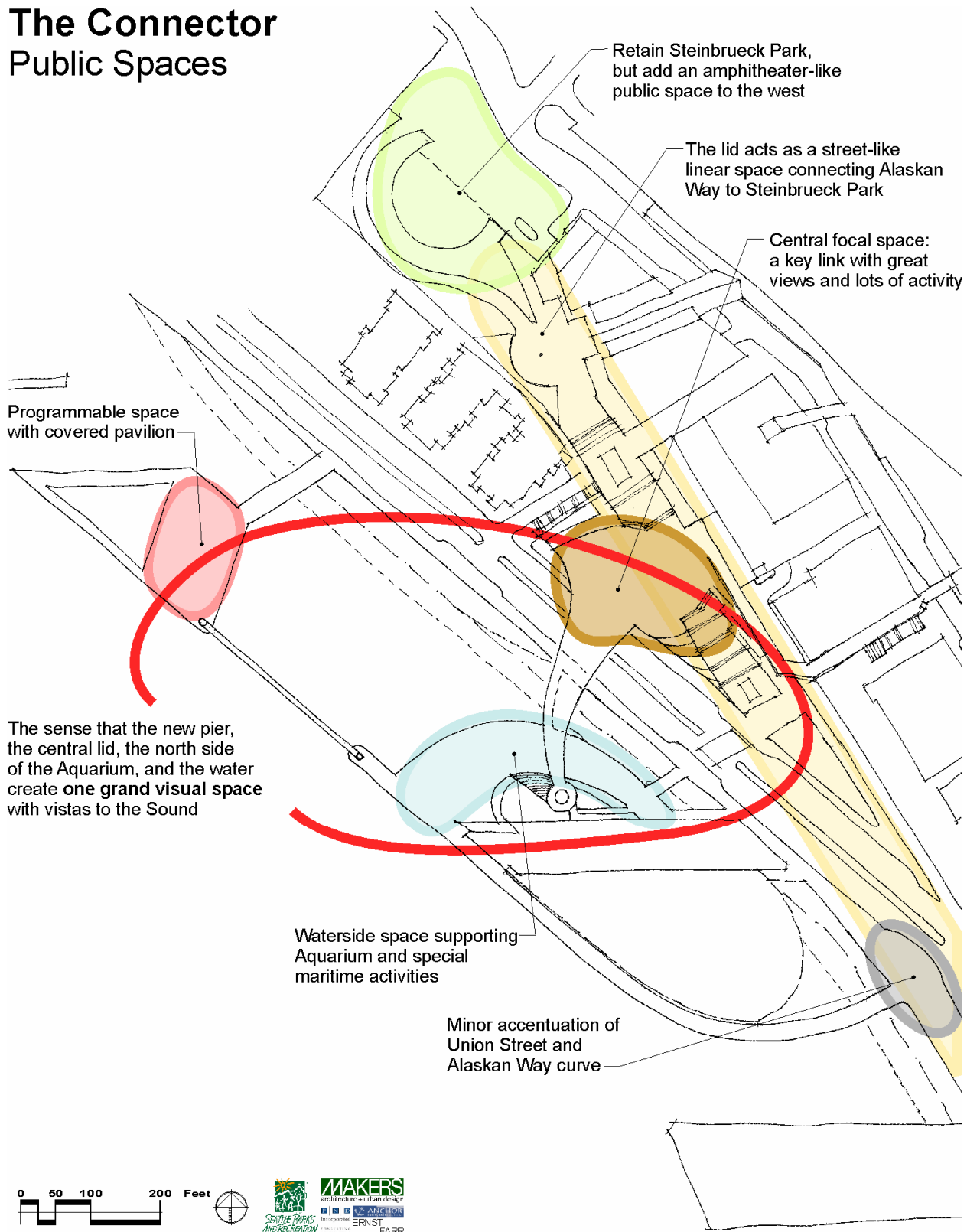


Figure 62. The Connector public spaces.

The Connector Pedestrian Circulation

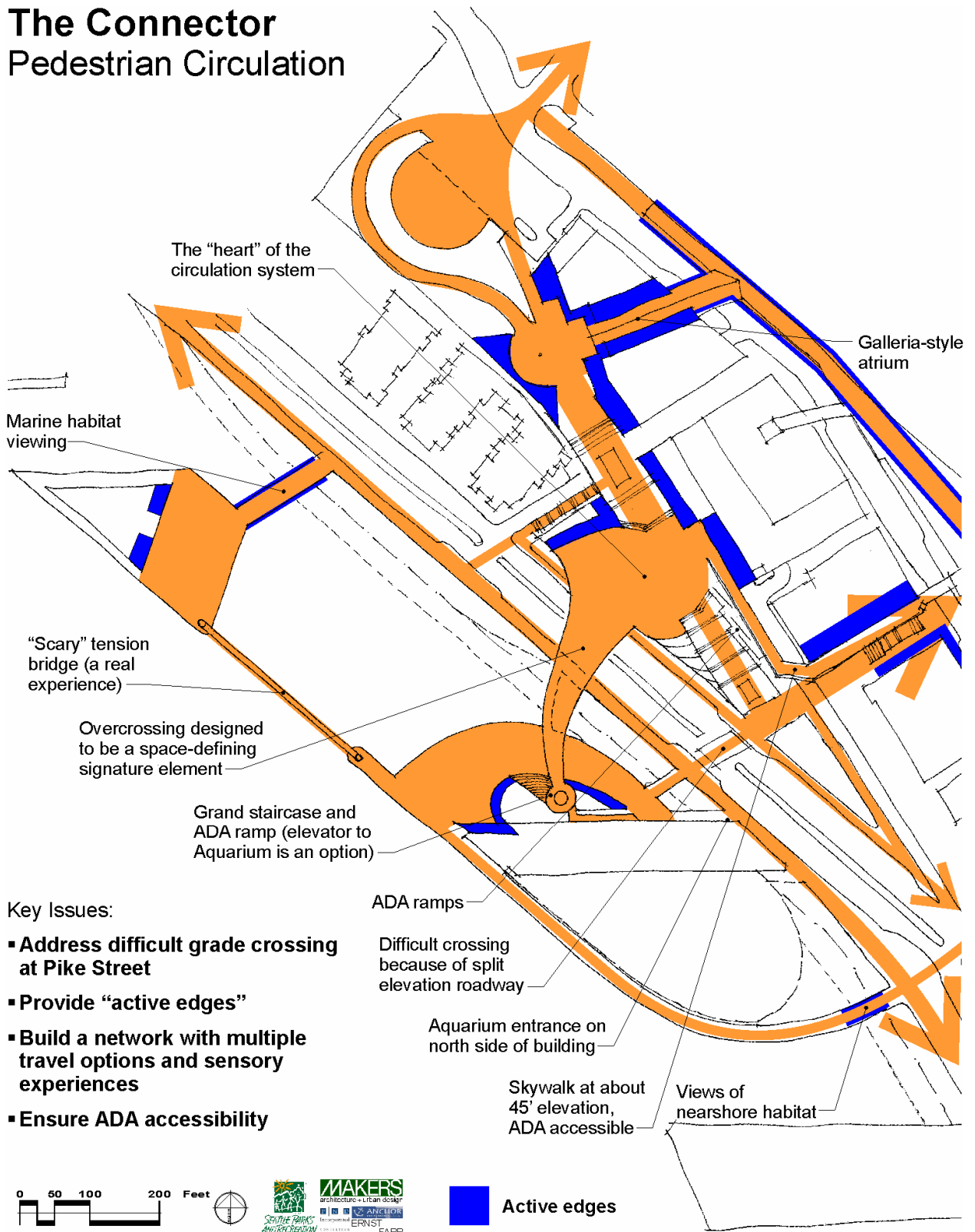


Figure 63. The Connector pedestrian circulation.

The Connector Habitat

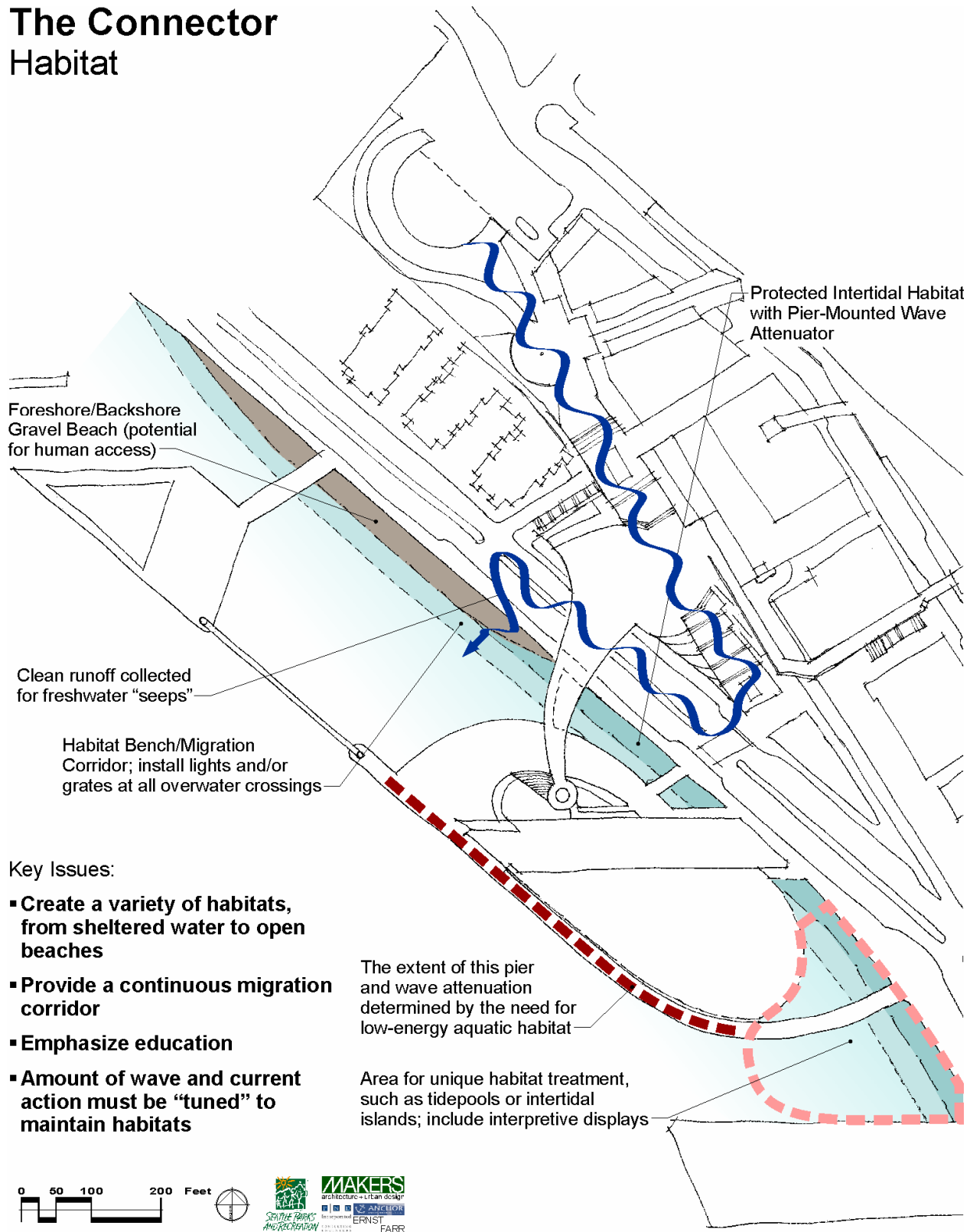


Figure 64. The Connector habitat.

The Connector Phasing

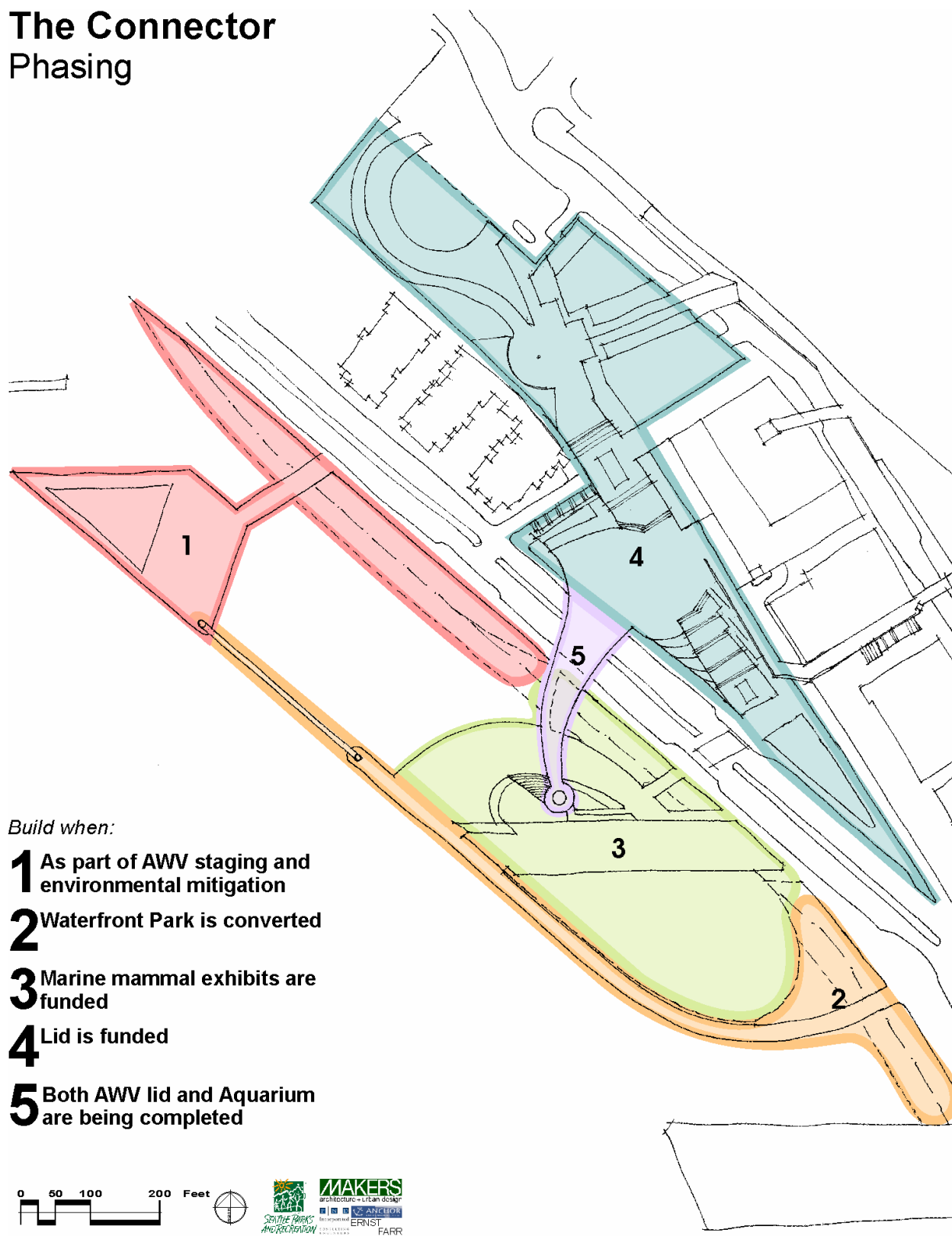


Figure 65. The Connector phasing.

Multipurpose Pier

The Multipurpose Pier alternative relocates and reconfigures Piers 62/63 to allow more efficient use of the space and accommodate year-round public activities along the deck perimeter. Moving the pier to the south would allow better integration with the Aquarium so that open space on the Aquarium's north side would be activated. In addition, the new pier would include provision for a temporary cover, so events could be staged in the spring and fall. Because the pier would create a more vibrant focal point, Downtown/waterfront connections would emphasize an at-grade crossing at Pine Street.

Table 16. Summary of Multipurpose Pier Alternative

	FEATURES AND BENEFITS	DISADVANTAGES AND QUESTIONS
Uses	<ul style="list-style-type: none"> Provides perimeter activities: opportunities for children's play, picnicking, etc. 	<ul style="list-style-type: none"> Must activate the north and west sides of the Aquarium.
Spaces	<ul style="list-style-type: none"> Waterside spaces are clustered north of the Aquarium. The lid terraces down to the waterfront to provide a crossing at Pine Street. 	<ul style="list-style-type: none"> The spatial connections are not as interesting as other alternatives.
Circulation	<ul style="list-style-type: none"> Utilizes a crossing at Pine Street. Provides an arcade on the ground floor at the north side of the Aquarium. 	<ul style="list-style-type: none"> Is the Pine Street connection too far north to serve the Aquarium?
Habitat	<ul style="list-style-type: none"> Provides approximately one-third beach and two-thirds protected cove habitat. 	<ul style="list-style-type: none"> Provides the least beach of all alternatives. (The relative merits should be evaluated.)
Phasing	<ul style="list-style-type: none"> Phasing is not constrained by tunnel construction. A new pier could facilitate SR 99 construction staging. 	

Multipurpose Pier Land Uses

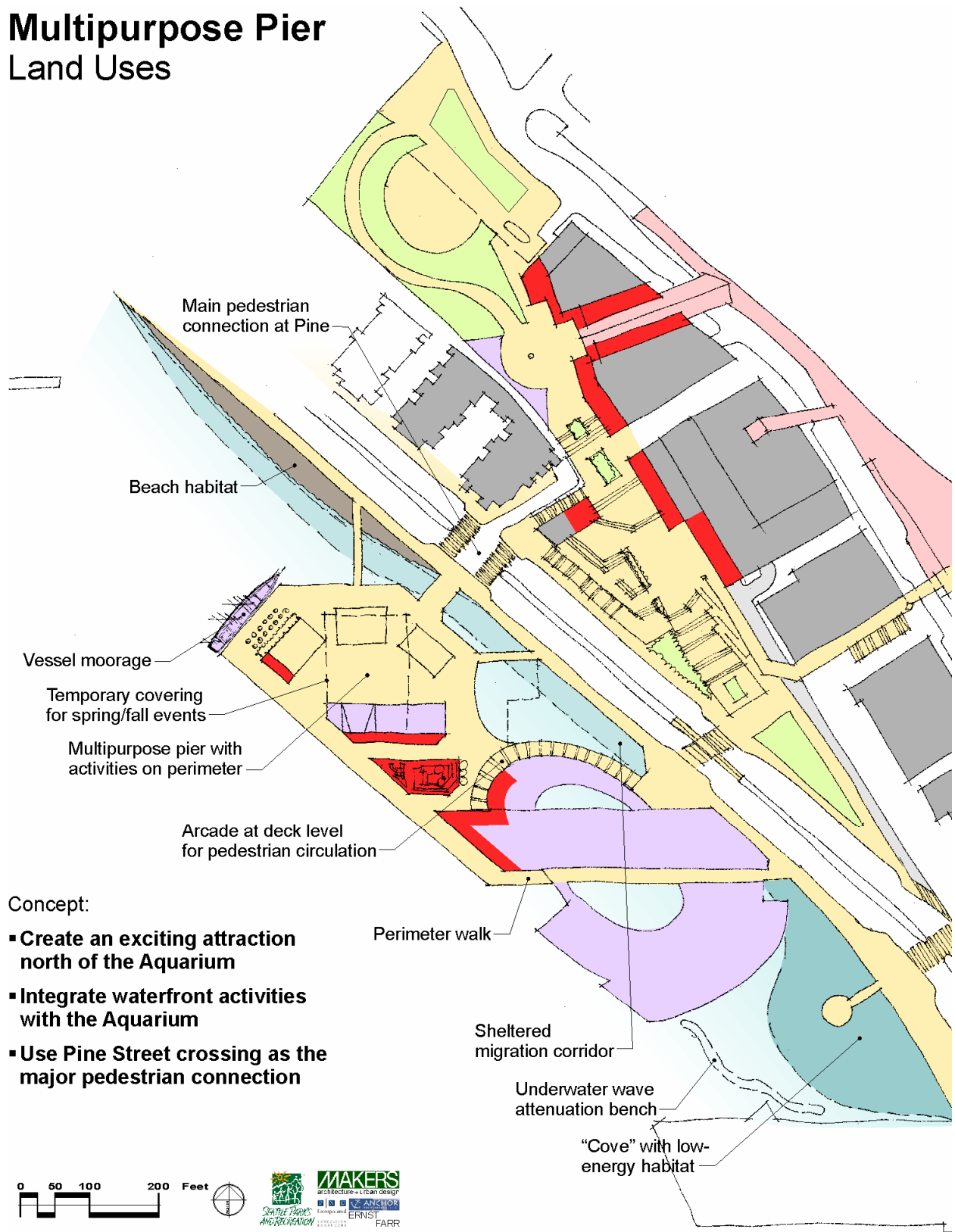


Figure 66. Multipurpose Pier land uses.

Multipurpose Pier Public Spaces

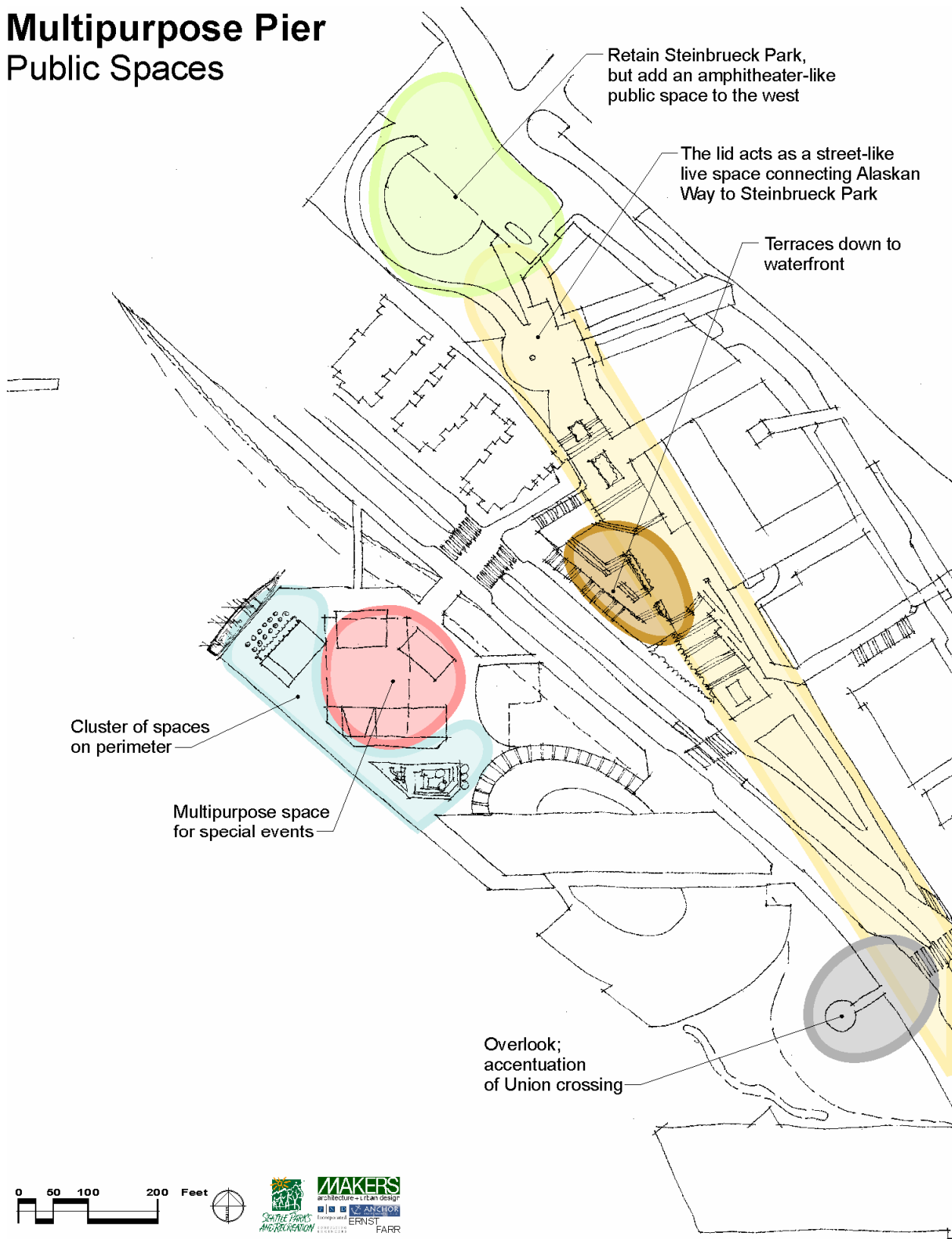


Figure 67. Multipurpose Pier public spaces.

Multipurpose Pier Pedestrian Circulation

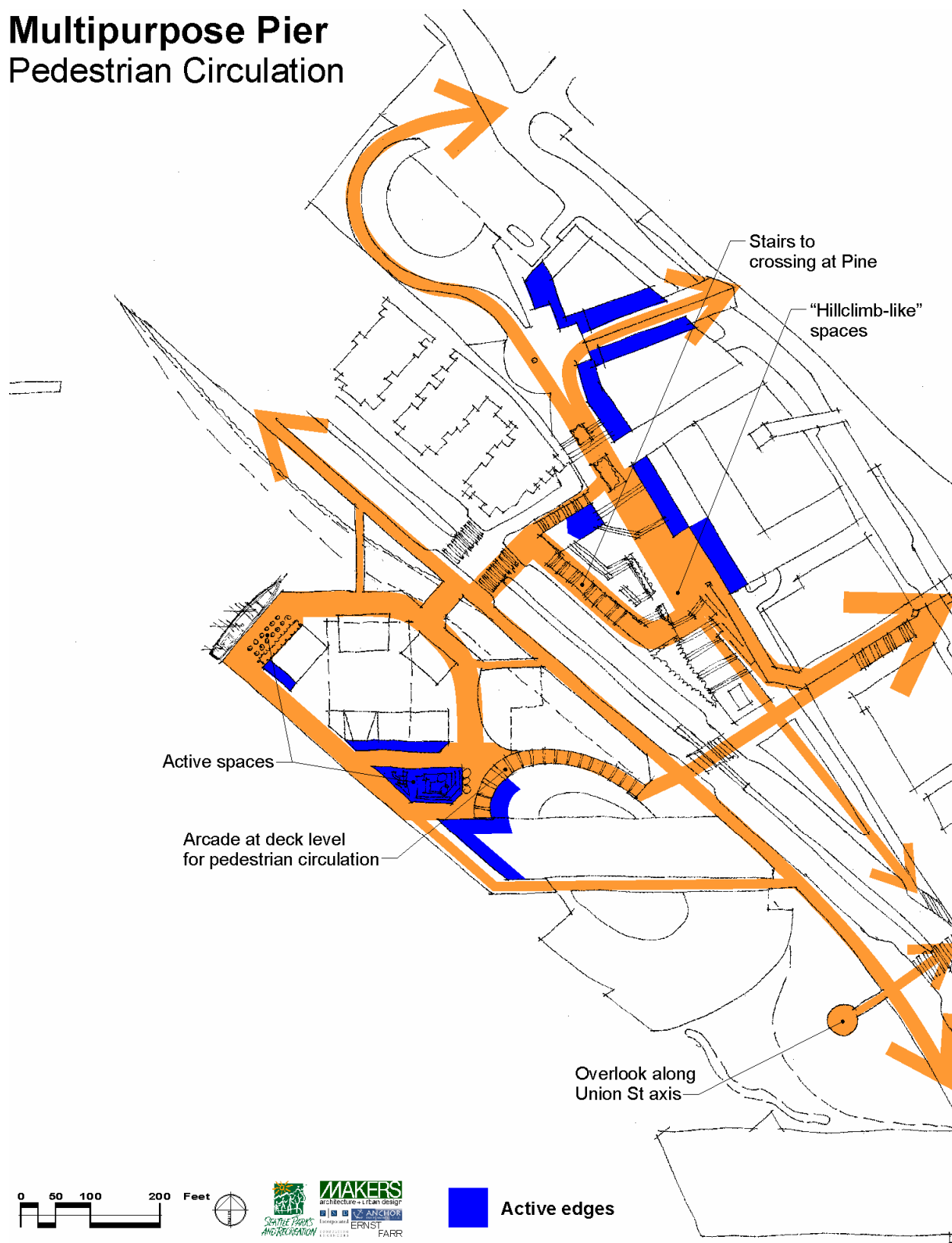


Figure 68. Multipurpose Pier pedestrian circulation.

Multipurpose Pier Habitat

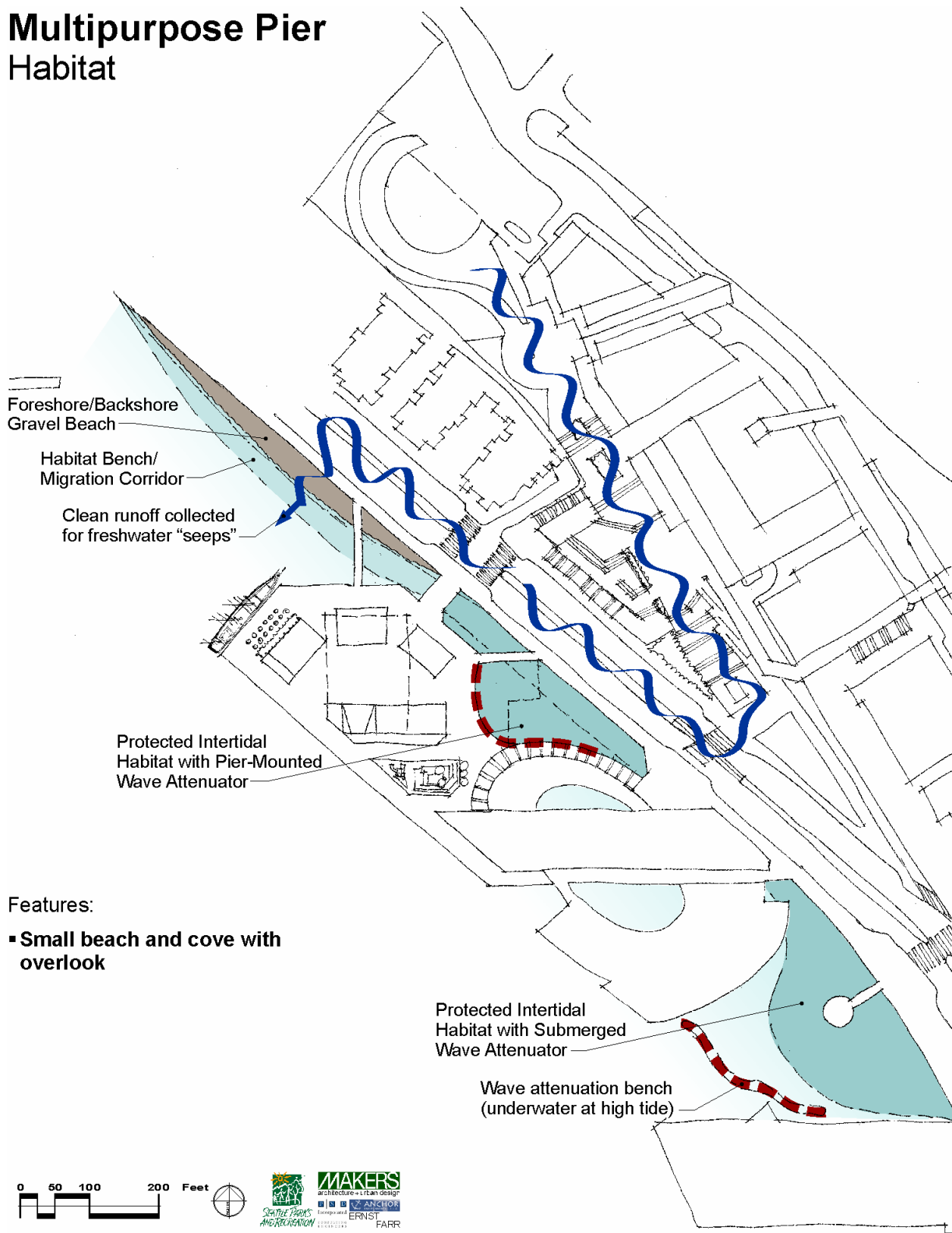


Figure 69. Multipurpose Pier habitat.

Multipurpose Pier Phasing

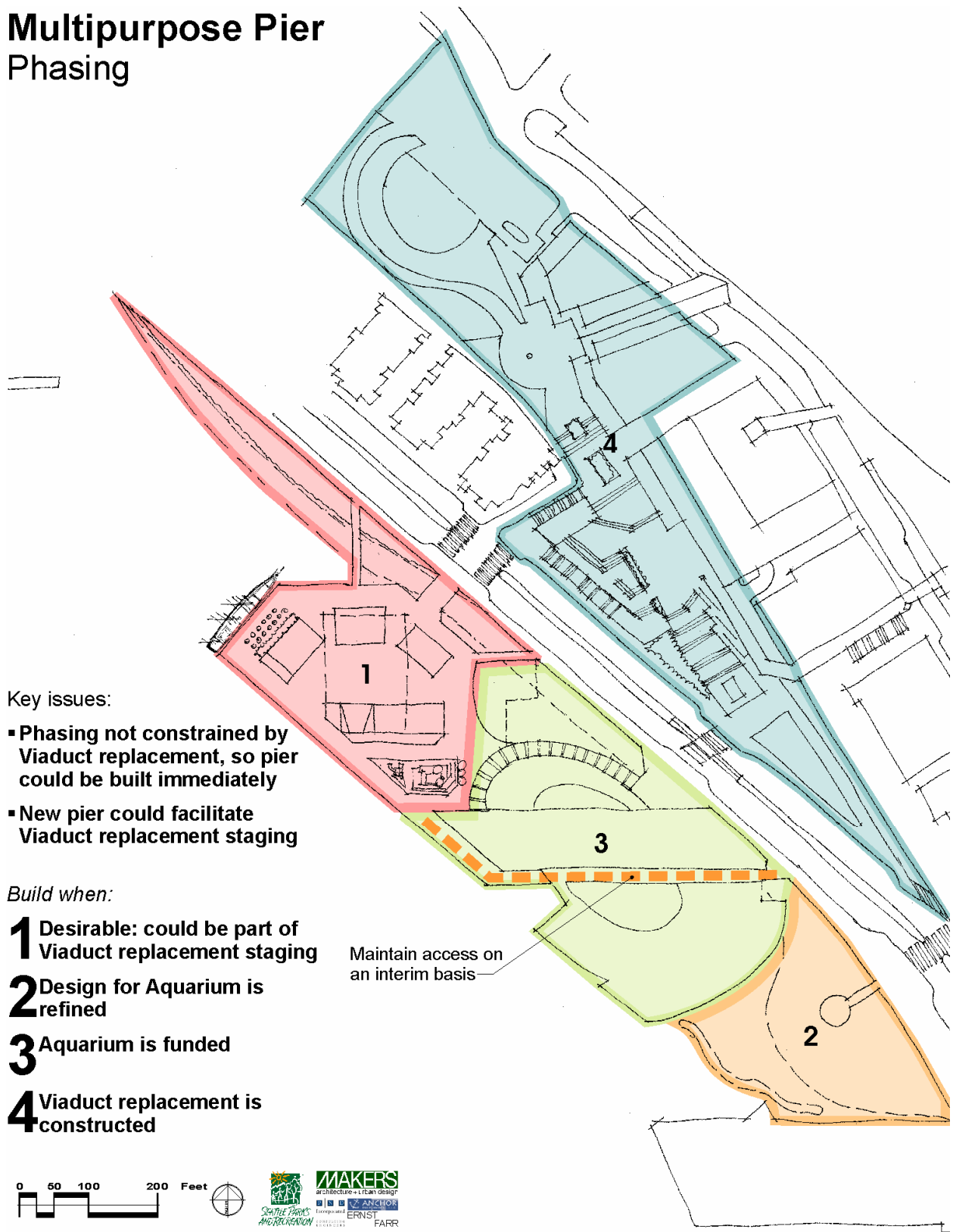


Figure 70. Multipurpose Pier phasing.

Relative Cost Comparisons

The table below presents planning-level estimates of habitat restoration construction costs for each of the three alternatives.

Table 17. Estimates of Habitat Restoration Costs

ALTERNATIVE	LOW ESTIMATE	HIGH ESTIMATE
Aqua Link	\$8,227,000	\$13,005,000
The Connector	\$7,637,000	\$11,930,000
Multipurpose Pier	\$7,882,000	\$12,150,000

5. RECOMMENDATIONS

This chapter makes recommendations for a future work process, specific short-term recommendations for Waterfront Park, and design guidelines that will guide development on the SR 99 tunnel lid, PC-1 North site and Victor Steinbrueck Park.

Future Work Process

The planning concepts advanced in this feasibility study will be refined over the next year in consort with development of the City's Waterfront Concept Plan.

Additionally, the three concept alternatives presented in this report will be used to guide an environmental impact statement (EIS) process that will lead to adoption of a new master plan for the central waterfront. The new plan will replace the outdated "Portal to the Pacific" plan that proposed development of a new aquarium at the site of Piers 62/63. The new plan will be based on the assumption that the Aquarium will continue at Pier 59 and that new public spaces will be created to the north and south of that structure at the site of Piers 62/63 and Waterfront Park. Public forums will be held to elicit public comment on the development of the plan.

The design guidelines for the SR 99 tunnel lid suggested in this study will be submitted to the WSDOT design team for consideration as design of a replacement for the Alaskan Way Viaduct begins next year. While actual design of the surface improvements on the lid may not happen for several years, basic structural design parameters and relationships to adjacent properties must be confirmed in the near future for design of the roadway structure.

The replacement of the Alaskan Way Viaduct will be a massive, multiple-year undertaking, and many of the recommendations presented in this study will likely be undertaken in phases over the next decade or more. As such, certain recommendations relative to the space south of the Aquarium may not be implemented for some time. In the meantime, structural repairs are necessary to maintain Waterfront Park, and other work is needed to address shortcomings of the Park's existing design. The changes

suggested in this study will be refined concurrent with the Waterfront Concept Plan in 2006, and will be implemented as funding becomes available in the next few years.

Waterfront Park Near-Term Actions

If Waterfront Park is to remain viable for the next five years, the following investments will need to be made soon to address the structural deficiencies that have been identified:

■ Promenade and terrace areas

Mechanical processes can cause the concrete and steel components to fail. The following actions are required immediately if the structural integrity of the pier is to remain (Pier 58 Corrosion Control Review, 2004):

- Correct section loss of the Pier 58 concrete-filled steel pipe piles.
- Recoat the H-piles above mean tide level.
- Replace the cathodic protection system.

Probable construction cost estimates for the above repairs was \$388,000 in 2004 (Pier 58 Corrosion Control Review). As construction costs have increased significantly in the past year (about 40%), the construction cost estimate in today's dollars is \$543,200.

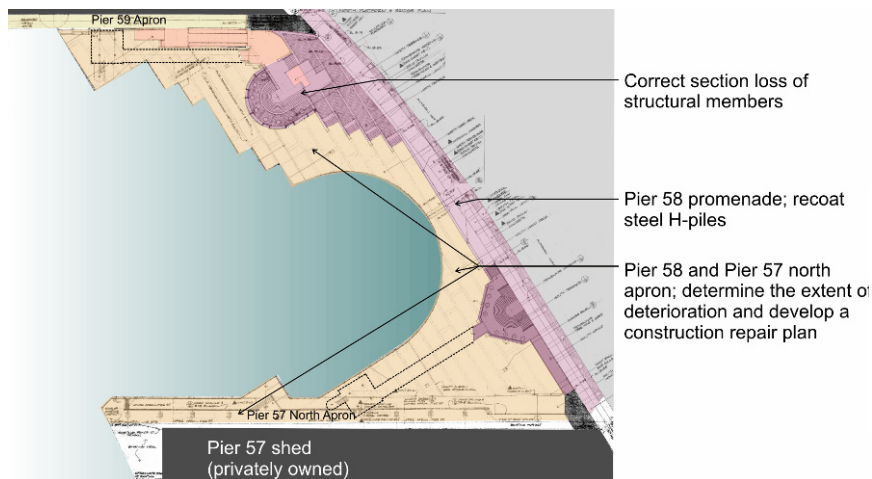
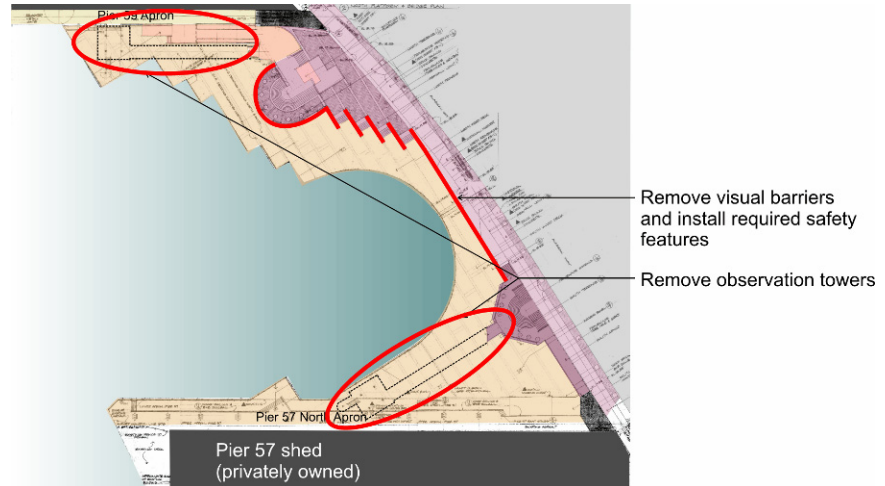


Figure 71. Recommended structural improvements to Waterfront Park's promenade and terrace areas.

The most recent inspection of the timber piles and support structure of Waterfront Park was conducted in 2000 (Maintenance Program, Pier 58/59, 2000). A three phased repair strategy was recommended to begin in 2001 and end in 2006 with a probable construction cost of \$708,000 (in 2000 dollars). Some of the recommended work has been completed. At this time, a current structural evaluation should be performed on those areas that did not receive any

upgrades. Those timber pilings identified as having reduced structural integrity should be repaired or replaced. A probable construction cost estimate can be performed when the number of piles requiring repair or replacement has been determined.

Figure 72. Recommended structural improvements to address functionality and public safety issues.



The improvements identified above do not address the functionality and public safety issues that exist with the current design. Maintaining line-of-sight from the street will help to discourage illicit activities in the apron area. In addition to the structural promenade and terrace improvements identified above, the following improvements and repairs have been identified for functionality and safety reasons:

- Remove the north and south observation towers.
- Remove the visual barriers along the promenade and modify edges by installing curbs and railing. Probable cost estimate is \$75,000.



Figure 73. Existing condition (right) and sketch (left) of proposed modifications to the wall along the promenade.

Design Principles for the SR 99 Tunnel Lid

The potential construction of a lid over the proposed SR 99 tunnel as it rises from below ground to meet the Battery Street tunnel provides the opportunity to spatially connect the waterfront with Steinbrueck Park and the north Market area. The lid makes many design concepts possible. This study does not present a specific layout or design but does recommend a set of design principles, or guidelines, which emerged during the feasibility study and review process. The guidelines/principles presented below are organized into five categories: Circulation, Spaces, Redevelopment, Design Character, and Special Opportunities and Considerations.

Circulation

C-1 Address the grade difference across Alaskan Way at Pike Street by providing alternate routes to the waterfront.

If the tunnel/ramp configuration is built as currently proposed, the east side of the Alaskan Way crossing at Pike Street will be 9 feet higher than the west side. This will greatly hamper access across Alaskan Way at this crossing, where pedestrian volumes are the highest of the Downtown waterfront. The lid design must facilitate the east-west pedestrian connection in the Union/Pike/Pine Street vicinity by one or more measures, including:

- Providing several safe, comfortable pedestrian crossings, each with design emphasis, to facilitate pedestrian movement.
- Providing a significant central crossing, such as a specially designed pedestrian bridge.
- Identifying some measure to make Pike and/or Union Streets safe, effective at-grade crossings.

C-2 Provide safe, comfortable, enjoyable circulation for all groups.

Ensure compliance with the Americans with Disabilities Act (ADA). The average grade up the lid is approximately 7 percent, so special ramp design and/or mechanical methods will be necessary to provide access. Beyond ADA compliance, ensure that pedestrian circulation is safe, comfortable, and

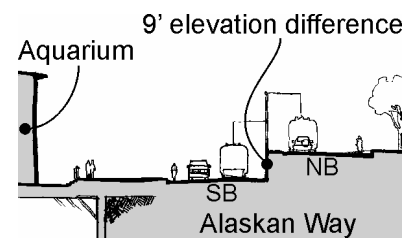


Figure 74. As currently planned, there will be a 9' drop between the east and west sides of Alaskan Way at Pike Street in front of the Aquarium.

convenient for all people, including people of limited mobility, families with children in strollers, and young children.

C-3 Design circulation routes to accommodate relative pedestrian volumes.

Identify pedestrian volumes and potential congestion spots. (See *Figures 6 and 7 in Chapter 2, Context.*) The Aquarium is the largest draw in the project area.

Table 18. Pedestrian Counts at Select Locations

LOCATION	LUNCH AVERAGE	DAILY AVERAGE
1 st Ave @ University St/ Harbor Steps	2,507	7,748
Up and down Harbor Steps	1,589	2,880
1 st Ave @ Yesler St: crossing Yesler	2,495	6,640
Alaskan Way @ Union St	1,917	5,856
Alaskan Way @ Pier 56	1,580	3,741

Source: *Seattle's Central Waterfront Plan Background Report, 2003.*

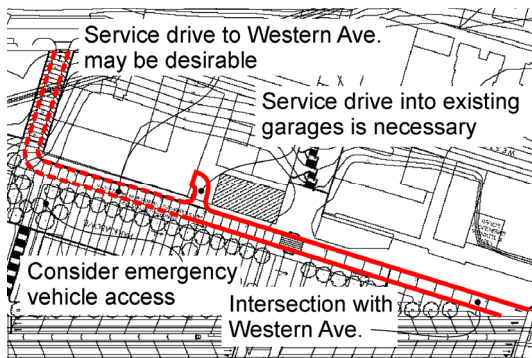


Figure 75. Access road requirements.

C-4 Provide access for service and emergency vehicles and to the parking areas east of the lid.

An access road is required to the parking areas, and accommodation of service and emergency vehicles on the lid is critical.

C-5 Provide structured parking where feasible and where it does not impact pedestrian areas.

The PC-1 North site and the Triangle Lot are two possible sites where additional parking might be accommodated below grade.

C-6 Employ Crime Prevention Through Environmental Design (CPTED) principles in all pedestrian areas.

Participants and reviewers of this study emphasized the need for safety and security. CPTED principles, described in Appendix C, are one way to accomplish this.

Spaces

S-1 Consider the lid as a linear sequence of varying spaces.

There are several natural access points and subareas within the lid's linear geometry that should be articulated or accentuated so that a person traveling along the roughly north-south axis traverses a variety of spaces and design experiences. The Victor Steinbrueck Park area, PC-1 North site, Triangle Lot, Pike Street Hillclimb crossing, and triangle of land between Pike and Union Streets all provide opportunities for different spatial, landscape, and design treatments. At the same time, the linear geometry of the lid should tie the subspaces together, and the views up and down the corridor (to and from Alaskan Way) should be maintained.

S-2 Take advantage of solar access.

Locate and design spaces to receive sunlight. Locate some spaces in the sheltered, well-lit areas for outdoor seating in spring and fall.

S-3 Apply defensible space principles and CPTED guidelines to all habited spaces.

(See Appendix C for more detail.)

S-4 Incorporate “green design” elements into the lid.

Rainwater free from vehicular pollutants should be captured and used for freshwater seeps on the shoreline. Sustainable landscape design and construction materials and energy-saving fixtures should be used when appropriate.

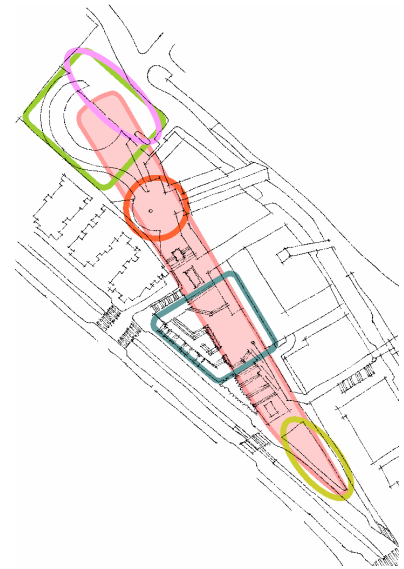


Figure 76. The lid should be considered as a linear sequence of interlocking spaces.

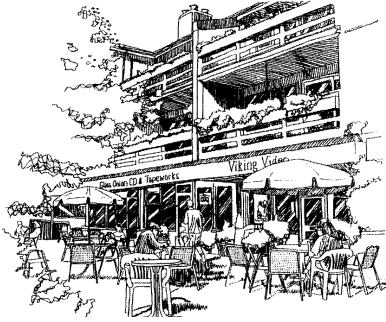


Figure 77. “Active edges” are uses and features that encourage human activity.

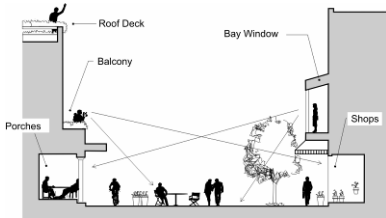


Figure 78. Building features that increase passive surveillance.

Redevelopment

R-1 Establish uses that provide “active edges” along all major public spaces.

“Active edges” are the edges of public open spaces that foster human activity. Examples include businesses such as restaurants, cafes, and shops with attractive storefronts; exhibits and displays; comfortable seating areas; musician nooks; theater seating; special features such as fountains; and areas for special events.

R-2 Encourage upper-story uses that provide passive surveillance of open spaces.

Multistory development (especially housing) on the east side of the SR 99 tunnel lid would provide eyes on the public open space, increasing security.

R-3 Encourage uses that support Market and waterfront activities.

Market representatives have generally noted that additional Market stalls on the lid would likely be unsuccessful because merchants prefer to be close to similar vendors. However, they also noted that there is a lack of eating and drinking establishments in the Market, and it seems that specialty shops might fare well on the lid. Further market research should be undertaken to identify the most appropriate types of uses.

Design Character

D-1 Protect important views.

Key views to maintain include:

- Views of the water and Mount Rainier from the Victor Steinbrueck Park vicinity.
- Views of the water and south waterfront area from the elevated Triangle Lot area.
- Views north and south along the lid (to and from Alaskan Way).
- Views up and down (east and west) from the Pike Street Hillclimb.

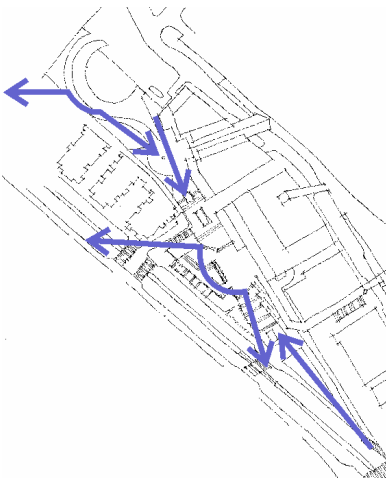


Figure 79. Key views.

D-2 Ensure a sense of design authenticity.

Adhere to Market guidelines in the Pike Place Market Historic District. Avoid false historic styles.

Incorporate the design character and elements of surrounding buildings on Western Avenue. These buildings generally feature a refined utilitarian quality characterized by:

- Articulated and exposed structural members (e.g., exposure of the structural frame).
- Flat, unadorned panel surfaces.
- Simple geometries.
- Simple glazing patterns.
- Subdued color.
- Utilitarian industrial materials.

However, this does not mean that colorful features, artwork, or special treatments or materials are inappropriate as accents. Refined detailing and proportions, well-crafted finishes, and elements that provide human scale are encouraged.

D-3 Integrate landscape elements.

Plant materials should be incorporated to:

- Articulate or frame spaces.
- Add interest and variety through texture and color.
- Soften or screen unsightly areas (e.g., service areas or garages).
- Emphasize or embellish other design features.

D-4 Generally speaking, emphasize an urban, structural character over a natural or “grass and tree” park-like setting.

Given the anticipated amount of use, ample circulation pathways and paved, multi-activity spaces should be emphasized over vegetated areas. However, there is room for both “hard” and “soft” (or green) areas.



Figure 80. Industrial windows, exposure of structure and simple detailing are characteristics of Market architecture.



Figure 81. Simple forms and patterns create a distinctive utilitarian design that is embellished by colorful signs and storefronts.



Figure 82. Pedestrian bridges are a distinctive element on the Market's west side. Note the industrial materials, articulated structure and flat surfaces.



Figure 83. Small amounts of landscaping can greatly enhance active urban spaces.



Figure 84. Victor Steinbrueck Park.

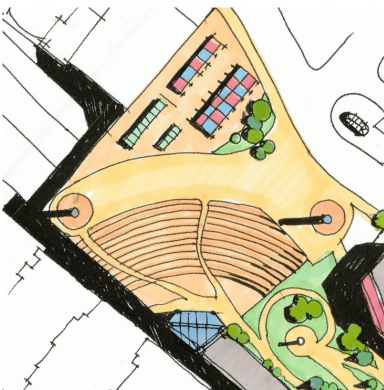


Figure 85. The lid area west of Steinbrueck Park offers an excellent opportunity for an amphitheater-like space. The illustration shows a space accommodating about 3,500-4,000 people, but smaller options are also possible.

Special Opportunities and Considerations

The following discussion presents opportunities and suggested design directions specific to individual sites on the lid. Many of the design elements discussed in this section are presented as suggestions or options for consideration rather than guidelines.

Victor Steinbrueck Park and Vicinity

- Care should be taken in expanding Victor Steinbrueck Park westward so that the original park's design concepts and key features are not lost.
- Maintain or provide views of Elliott Bay, the Olympics, and Mount Rainier.
- Consider an amphitheater-like space to the west of Victor Steinbrueck Park. The expanse and elevation of the new lid may provide an ideal site for a bowl-shaped space, perhaps with tiered seating, that would be a natural setting for performances, rallies, events, and celebrations. Views of the Sound and Olympics would make this a natural focal point for civic gatherings.

PC-1 North Site

- Consider a broader set of development options for the PC-1 North site. The 2002 charrette and feasibility study were limited in the amount and type of development considered. The Seattle Design Commission 2005 recommendations recommended maximizing development on the PC-1 North site and orienting it toward the lid open space. A substantial mixed-use development could add "active edges" and "eyes on the park," increasing security and vitality.
- Create a pedestrian link from the Market arcade through the Desimone Bridge onto the lid. This could be in the form of a multi-level galleria or atrium with dramatic water views.

- Create a distinctive space west of where the pedestrian link (or galleria) reaches the lid. This will be a natural focal point. The condominiums to the west will block at-grade views, so this might be one section of the lid that is relatively enclosed spatially. Some form of structure or feature might hide the back side of the condominiums.

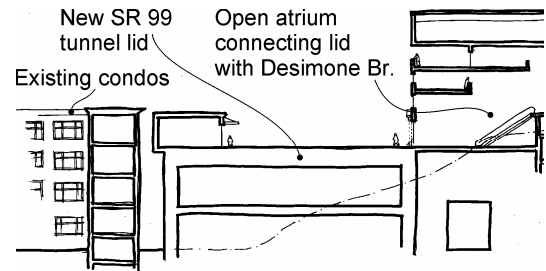


Figure 86. Section through PC-1 North site.

Central Lid Space (Triangle Lot Vicinity)

- Create a larger, central open space south of the Pine Street alignment during the design program for multiple uses and create “active edges” on the northeast and, possibly, the south sides. The western edge might be a “belvedere” looking over the Sound or a cascade of stairs to Alaskan Way.
- Consider a parking garage under the central plaza between the lid structure and Alaskan Way.
- Wrap active building spaces around the vent stack.



Figure 87. Possible configuration of Triangle Lot.

Lid Section Between Pike and Pine Street Alignments

- Treat the service road in a way that provides access to parking but does not intrude on pedestrian-oriented lid spaces. It may be that the service road can be tucked behind narrow buildings, houses, small shops, or cafes, or it may be better to treat the service road as a low-volume/low-speed roadway and orient new storefronts along it as one would along a refurbished alley. A new two-story structure might enclose the service drive, provide additional space for offices or restaurants, and cover the back side of the existing parking structures.

South End of Lid (Pike Street to Union Street)

- Consider a roughly level ADA-accessible ramp from the Hillclimb at Western to the central space on the lid. This might provide a convenient circulation route.
- Consider a major street crossing at Union Street. With the redevelopment of properties to the east, the Union Street corridor will be re-opened and a pedestrian link established. Since Union Street will not have the grade differential that is at Pike Street, it may be a more attractive crossing across Alaskan Way. However, unless circulation patterns change dramatically, it will not be a substitute for a safe, convenient crossing in the Pike/Pine vicinity.

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